CLAIMS

What is claimed is:

1-33. (canceled)

34. (previously presented) A method for screening for genes whose expression is altered by disease, age, or exogenous agent, comprising:

screening a sample microarray comprising genes from a library, cells or animal exposed to the disease, age or exogenous agent, wherein expression of all of the genes is under control of the same regulatory element; and

comparing the expression of the genes to expression of control genes from a library, cells or animal not exposed to the disease, age or exogenous agent.

35. (currently amended) ~~The method of claim 34~~ A method for screening for genes whose expression is altered by disease, age, or exogenous agent, comprising:

screening a sample microarray comprising genes from a library, cells or animal exposed to the disease, age or exogenous agent, wherein expression of all of the genes is under control of the same regulatory element; and

comparing the expression of the genes to expression of control genes from a library, cells or animal not exposed to the disease, age or exogenous agent;

wherein the microarray further comprises control genes that are not under the control of the same regulatory element.

36. (currently amended) ~~The method of claim 34~~ A method for screening for genes whose expression is altered by disease, age, or exogenous agent, comprising:

screening a sample microarray comprising genes from a library, cells or animal exposed to the disease, age or exogenous agent, wherein expression of all of the genes is under control of the same regulatory element; and

comparing the expression of the genes to expression of control genes from a library, cells or animal not exposed to the disease, age or exogenous agent;

wherein the regulatory element is selected from the group of regulatory elements consisting of osmotic response element, retinoic acid response element, conserved proximal sequence element, vitamin D response element, sterol response element, TNF-alpha response element, serum response element, cAMP response element, antioxidant response element, glucotocorticoid modulatory element, gonadotropin-releasing hormone-response element, pheromone response element, insulin response element, interferon consensus response element, estrogen response element, hypoxia response element, E2F transcription factor, xenobiotic response element, endoplasmic reticulum stress response element, iron-response element, androgen response element, stress response element, RAS-responsive element binding protein 1, and transforming growth factor, beta-1 response element.

37. (canceled)

38. (original) The method of claim 34 wherein the disease is selected from the group consisting of neurological disorders, cardiovascular disorders, bone and muscle disorders, blood or

circulation related disorders, and cancer.

39. (original) The method of claim 38 wherein the diseases are selected from the group consisting of Alzheimer's disease, Parkinson's disease, Huntington's disease, myocardial hypertrophy, atherosclerosis, myocardial infarction, osteoarthritis, osteoporosis, and autoimmune disorders.

40. (original) The method of claim 38 wherein the cancers are selected from the group consisting of breast cancer, prostatic hypertrophy, prostatic cancer, colon cancer, chronic lymphocytic leukemia, acute lymphocytic leukemia, brain tumors, pancreatic cancer, and heptatomas.

41. (canceled)

42. (previously presented) The method of claim 34 wherein the exogenous agent is a drug or toxin.

43. (previously presented) The method of claim 34 wherein the library is derived from cells or tissues treated with one or more compounds in vitro.

44. (previously presented) The method of claim 34 wherein the library is derived from cells obtained from an individual of a particular age, having a particular disease or disorder, or

derived from the neurological system, the cardiovascular system, the musculoskeletal system, or cancerous tissues.

45. (previously presented) The method of claim 34 wherein the exogenous agent is selected from the group consisting of proteins or peptides, sugars or polysaccharides, nucleic acid molecules, and synthetic molecules.

46. (previously presented) The method of claim 43 wherein the compound is selected from the group consisting of proteins or peptides, sugars or polysaccharides, nucleic acid molecules, and synthetic molecules.

47. (new) The method of claim 35 wherein the disease is selected from the group consisting of neurological disorders, cardiovascular disorders, bone and muscle disorders, blood or circulation related disorders, and cancer.

48. (new) The method of claim 47 wherein the diseases are selected from the group consisting of Alzheimer's disease, Parkinson's disease, Huntington's disease, myocardial hypertrophy, atherosclerosis, myocardial infarction, osteoarthritis, osteoporosis, and autoimmune disorders.

49. (new) The method of claim 47 wherein the cancers are selected from the group consisting of breast cancer, prostatic hypertrophy, prostatic cancer, colon cancer, chronic

lymphocytic leukemia, acute lymphocytic leukemia, brain tumors, pancreatic cancer, and heptatomas.

50. (new) The method of claim 35 wherein the exogenous agent is a drug or toxin.

51. (new) The method of claim 35 wherein the library is derived from cells or tissues treated with one or more compounds in vitro.

52. (new) The method of claim 35 wherein the library is derived from cells obtained from an individual of a particular age, having a particular disease or disorder, or derived from the neurological system, the cardiovascular system, the musculoskeletal system, or cancerous tissues.

53. (new) The method of claim 35 wherein the exogenous agent is selected from the group consisting of proteins or peptides, sugars or polysaccharides, nucleic acid molecules, and synthetic molecules.

54. (new) The method of claim 35 wherein the compound is selected from the group consisting of proteins or peptides, sugars or polysaccharides, nucleic acid molecules, and synthetic molecules.